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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/606,407

06/29/2000

Jang Jin Yoo

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10/05/2004

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EXAMINER

SCHECHTER, ANDREW M

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/606,407	Applicant(s) YOO ET AL.	
	Examiner Andrew Schechter	Art Unit 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 23 June 2004 have been fully considered but they are not persuasive.

The declarations filed on 23 June 2004 under 37 CFR 1.131 has been considered but are ineffective to overcome the *Kim et al.*, U.S. Patent No. 6,462,798 reference.

The evidence submitted is sufficient to establish a conception of the invention prior to the effective date of the *Kim* reference.

However, the evidence submitted is insufficient to establish diligence from a date prior to the date of reduction to practice of the *Kim* reference to either a constructive reduction to practice or an actual reduction to practice. The declarations are silent on the period between 17 May 1999 (the filing date of the Korean Application No. P 1999-9058) and 29 June 2000 (the filing date of the U.S. application), and therefore fail to establish diligence in this period. For this reason, the declarations are ineffective to overcome the rejections over *Kim*.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-16 and 18-37 are rejected under 35 U.S.C. 102(e) as being anticipated by *Kim et al.*, U.S. Patent No. 6,462,798.

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Kim discloses [see Figs. 3, 11, and 12, among others] a multi-domain LCD comprising first and second substrates [31, 33] opposing each other, between them a liquid crystal layer [unlabeled], gate lines [1], data lines [3] defining at least two pixel regions, a common auxiliary electrode [15] on a layer equal to the gate lines surrounding the pixel region, a gate insulating film [35], a passivation film [37] on the gate insulating film, a pixel electrode [13] with a plurality of domains, a light-shielding layer [25] on the second substrate, a color filter layer [23] on the light-shielding layer, a common electrode [17] on the color filter layer, at least one electric field distortion dielectric structure [53] in each of the at least two pixel regions, wherein the dielectric structures in neighboring pixel regions have different configurations [see Figs. 11 and

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12, where the configurations are mirror-images of each other], and an alignment film [not shown in figures, see abstract]. Claims 1, 35, and 36 are therefore anticipated.

The pixel electrode and light-shielding layer can overlap the common-auxiliary electrode, as shown in Fig. 5a, so claims 2 and 3 are also anticipated. The pixel electrode does not overlap the common auxiliary electrode in Fig. 3a, while the light-shielding pixel does overlap the pixel electrode, so claims 4 and 5 are also anticipated. The gate insulating film and passivation film are formed on the whole substrate, which includes a "region except the common auxiliary electrode", so claim 6 is also anticipated.

The common auxiliary electrode is electrically connected with the common electrode [col. 4, lines 34-37], so claim 7 is also anticipated. There is a thin film transistor, described as being that of U.S. Patent No. 5,694,185 [col. 6, lines 6-10], which is formed at the crossing of the gate and data lines, so claim 8 is also anticipated. The dielectric structures can be on the pixel or common electrodes, or on the color filter layer [col. 6, lines 18-20], so claims 9-11 are also anticipated.

The pixel electrode, passivation layer, gate insulating film, common electrode, and/or color filter layer can have an electric field induction window [col. 6, lines 20-24], as can an overcoat layer on the color filter layer [col. 9, lines 61-62], so claims 12-16, 18, and 37 are also anticipated. The passivation layer is BCB or SiNx [col. 4, lines 26-28] so claims 19 and 20 are also anticipated. The pixel electrode and common electrode are ITO and the common auxiliary electrode is Al [col. 4], so claims 21-23 are also anticipated.

The dielectric constant of the dielectric structure is smaller than that of the liquid crystal and the dielectric structure is a photosensitive material, such as BCB [col. 4, lines 49-55], so claims 24-26 are also anticipated.

The pixel region is divided into two regions with different driving characteristics, and different alignment characteristics; at least one region can be aligned, and/or there are regions which are not aligned [col. 6, lines 46-63], so claims 27-30 are anticipated.

The liquid crystal has positive or negative dielectric anisotropy, there can be a negative uniaxial or negative biaxial film, and the liquid crystal can include chiral dopants [col. 2, lines 30-40], so claim 31-34 are anticipated.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Schechter whose telephone number is (571) 272-2302. The examiner can normally be reached on Monday - Friday, 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H. Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS
Andrew Schechter
29 September 2004


TARIFUR R. CHOWDHURY
PRIMARY EXAMINER